

ANNUAL CASH RETURNS AND A BETTER WOODLOT

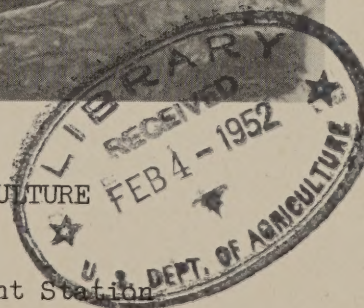
by

Stuart H. Buehling



U. S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE

Southeastern Forest Experiment Station
Asheville, N. C.
September 15, 1951



ANNUAL CASH RETURNS AND A BETTER WOODLOT

by

Stuart H. Buehling

Central Coastal Plain Branch
Southeastern Forest Experiment Station

The farm woodlots of Coastal Carolina add up to about 40 percent of the total forest land. Any farmer owning a parcel of this land is fortunate in that it lies in a region of unusually rapid tree growth. Consequently a farmer has a great opportunity to make substantial annual cash earnings if he follows a few simple forestry practices. It depends, of course, on what he has to start with, but even badly cut-over woodlots can be brought back relatively quickly if handled properly.

To demonstrate the benefits farmers can receive by improving the management of their woods, a farm woodlot was established in 1950 on the Santee Experimental Forest in Berkeley County, S. C. The area contains 33 acres, which is the average size of farm woods in Coastal Carolina. The timber-growing capacity of the tract is about average. Its trees are predominately loblolly pine ranging from 1 year to 40 years of age, plus a few scattered older ones. There are some small hardwoods under the larger pines and some large hardwoods in a swampy area of a few acres. Parts of the woodlot have been under cultivation in the past, but now there is only one acre of bare land. At present there are about 4700 board feet^{1/} of sawtimber and 8.3 cords of pulpwood per acre, including pine and hardwood. This woodlot is better stocked than the average, but is otherwise like those on thousands of farms in the coastal area.

^{1/} International 1/4-inch Rule.

The main objectives in managing the area are: to provide an annual cash income, an annual supply of wood products for home use, and in the course of time to grow a larger quantity and a better quality of wood products. The greatest money returns from this woodlot can be made by growing pine. Therefore, cutting and stand improvement will be aimed toward the removal of hardwood to favor the pine. Before management, it was estimated that this stand was growing at the rate of 240 bd. ft. per acre per year. Under good management this could easily be raised to 500 bd. ft. or more. The plan is to cut about two-thirds of the growth every year until the stand is built up to about ten thousand board feet per acre. From then on, the total annual growth will be cut. With this in mind, the cutting plan for the next five years is as follows:

For cash income:

Pine sawtimber - 28,000 bd. ft. in 5-year period
Hardwood sawtimber - 3,500 bd. ft. in 5-year period
Pine pulpwood - 52 cords in 5-year period

For home use:

Fuel wood - 6 cords annually
Fence posts - 42 pieces annually
Miscellaneous use - 18 pieces annually

The first year's harvest is now completed. Two men, using a cross-cut saw and an axe, did the cutting. In the absence of a tractor or mules, skidding of all products to the roadside was done with a jeep. The actual volume removed, the time required, and the prices received at the roadside for the 1950 farm woodlot harvest are as follows:

Product	Amount cut	Unit price received at roadside	Total income	Direct costs ^{4/}	Man hours ex- pended
Sawtimber	6,385 bd.ft. ^{2/}	\$45.00 per thousand	\$287.33	\$11.50	68
Pulpwood	5.5 cords ^{3/}	8.18 per cord	45.00	8.50	37
Total			\$332.33	\$20.00	105

^{2/} 5,450 bd. ft. Scribner; or 4,255 bd. ft., Doyle scale.

^{3/} Standard cord 128 cu. ft.

^{4/} Direct costs involve operation of jeep at \$1.00 per hour.

If stumpage only had been sold, a reasonable return would have been \$25.00 a thousand bd. ft. for the sawtimber and \$2.00 a cord for the pulpwood. This would have yielded a gross of \$170.63 for the stumpage. By cutting the products and piling them at the roadside, our theoretical farmer earned an additional \$141.70, or \$1.35 per hour of work. This may be compared to 69¢ which the Bureau of Agricultural Economics has determined the nation's farmers receive per hour of work on all farm products. Some of the advantages that may be gained when the farmer does his own logging can be summarized, as follows:

1. A good cash return for labor is possible.
2. A better job of woodlot improvement is more likely. The farmer would be careful not to damage the remaining trees.
3. The work may be done during otherwise slack periods.
4. The farmer can handle smaller quantities of products than are profitable for commercial loggers.

Those who lack the equipment, skills, or slack time for farm logging can make stumpage sales at larger intervals and still earn an acceptable return from a managed woodland.

In addition to the products cut for a cash income, 6 cords of fuelwood, 42 fence posts, and 18 miscellaneous pieces (crop posts, building timbers, gate poles, etc.) were removed for farm consumption. This required 47 man hours of work. Although there was no cash income realized from these products, they have an appraised purchase value of \$65.00. Moreover, all these products were taken from undesirable and cull trees and their removal benefited the remaining stand. In addition, the hardwood stumps were sprayed with a chemical solution to prevent resprouting, at a cost of \$2.00 for the chemical in addition to 1-1/2 man hours of labor.

As a step in building up the productivity of the woodlot, the one acre of bare land was planted. Slash pine and Arizona Cypress were hand planted in alternate rows. We plan to utilize the cypress for a cash crop of Christmas trees in three to five years. The slash pine will be grown for pulpwood and larger products. The planting took 33 man hours plus 1-1/2 hours of tractor and disk harrow operation for ground preparation. These expenses will be charged against returns from the plantation when the products are harvested.

Management of the farm woodlot will be continued for a number of years, using tools and methods that are available to most every farmer. We will make annual cuts for a cash income, for products to be used on the farm, and keep records of costs and returns to show advantages of a good forestry program in a farmer's woodland.

Farmers interested in better management of their woods are cordially invited to come and see this woodland. They can also obtain expert advice and guidance by writing to the S. C. State Commission of Forestry, Columbia, the State Extension Forester, Clemson College, Clemson, S. C., or by seeing their local County Agent.

